

DISPLAYS

FAQ

Q Do I need a widescreen monitor to watch HD footage on my PC?

A HD footage is shot in a widescreen aspect ratio of 16:9 (the ratio of width to height), with a resolution of 1,280x720 or 1,920x1,080. To watch HD footage, you need a monitor with a resolution of 1,280x720 or higher. A standard 5:4 17in monitor with a native resolution of 1,280x1,024 will do the job, but you'll be left with thick black bars at the top and bottom of the screen when viewing HD footage, which can be distracting.

A widescreen monitor can help alleviate these problems. Again, you'll need a monitor with a resolution of at least 1,280x720, such as a 19in widescreen monitor with a resolution of 1,440x900. HD footage is then scaled to match the monitor's native resolution.

You won't get a perfect fit, though, as most widescreen monitors have an aspect ratio of 16:10, so you'll still get very thin black bars across the top and bottom. However, this will be barely noticeable and far less distracting than with a standard monitor.

Lynley Oram

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SAMSUNG SyncMaster 245B

★★★★★

£340 inc VAT



Samsung's SyncMaster 245B is a large 24in widescreen monitor, but it has an elegant appearance that makes it seem less obtrusive than many smaller displays. Samsung has achieved this by styling the entire display in a discrete matt black and using a slender, but sturdy, stand and a thin 15mm bezel.

There are D-sub and DVI inputs. The DVI connector is HDCP-compliant, so you can watch content from an HD DVD or Blu-ray player. This is something you may want to do, given the 1,920x1,200 native resolution, which will cope with 1,080p footage. The monitor has an aspect ratio of 16:10 rather than the standard 1,080p aspect ratio of 16:9. This means that HD video will be viewed with thin bars across the top and bottom, although this doesn't detract from the onscreen action. For normal Windows use, the high-resolution screen is perfect for working with lots of documents and applications.

The SyncMaster 245B has a contrast ratio of 1,000:1, which is about average for a monitor of this size. This can be increased to 2,000:1 with the dynamic contrast ratio switched on. The dynamic contrast ratio works by monitoring the grey level and adjusting the backlight accordingly. Dark scenes cause the backlight power to be lowered, creating darker shades; light scenes cause the backlight power to be raised, creating lighter shades. This worked well when watching movies, which usually have scenes of a similar contrast level, but it can't improve high-contrast images.

In general, HD movie clips played beautifully on this screen. Detail was



sharp in even the darkest areas of a scene, with rich, vibrant colours. Sadly, this monitor is no good for a shared experience; its viewing angles are just too poor. At only 160° (vertical and horizontal), viewing angles are lower than many other monitors we've looked at. Just move a little to the side or below this screen, and you'll see an immediate deterioration in picture quality.

The SyncMaster 245B performed exceptionally well when connected to a PC. The picture was very sharp and finely detailed. Our greyscale gradient test is quite difficult for LCD monitors to handle, but the SyncMaster 245B did a good job, producing smooth transitions from black to white. Colours in test photos

were realistic, with natural skin tones.

This monitor has no pivot function, so the screen can't be turned on its side for viewing long documents and webpages. The stand is height-adjustable though, giving a screen elevation of 100mm to 195mm.

With excellent image quality, a high resolution and a great price, Samsung's SyncMaster 245B is a great choice for anyone who wants a large monitor for their PC.

Lynley Oram

SUMMARY

- ✓ HDCP support
- ✓ Excellent image quality
- ✗ Poor viewing angles

24in WIDESCREEN LCD 1,920x1,200 native resolution, 1,000:1 contrast ratio (2,000:1 dynamic mode), 5ms (grey to grey) response time, D-sub, DVI connectors
PART CODE LS24HUBCBQ
SUPPLIER www.morecomputers.co.uk
DETAILS www.samsung.com/uk

Also consider...

Iiyama E1900S

★★★★★

£140 inc VAT



Iiyama's E1900S has an air of sophistication about it, and its image quality is excellent. Focus is good, and it did well at picking out detail in dark areas. Colours are realistic and rich but not over-saturated, and skin tones look natural. At this price, the E1900S is a bargain.



19in LCD 1,280x1,024 native resolution, D-sub, DVI, 3.5mm line in connectors, 5ms response time, 700:1 contrast ratio
PART CODE PLE1900S-B2S
SUPPLIER www.computerwebstore.co.uk
DETAILS www.iiyama.co.uk

✓ Inexpensive; crisp focus; natural, rich colours FULL REVIEW Aug 2007

MIRAI DML-519W100

★★★★★

£108 inc VAT



Mirai's DML-519W100 displays sharp images and handled our greyscale transition test fairly well, with only a little banding at the lighter end of the gradient. Colours look natural. This is an inexpensive display, but it produces good image quality. It's a great buy if your budget is tight.



19in WIDESCREEN LCD 1,440x900 native resolution, D-sub, DVI, 3.5mm line in connectors, 8ms response time, 500:1 contrast ratio
PART CODE DML-519W100
SUPPLIER www.247av.com
DETAILS www.mirai.eu

✓ Inexpensive; crisp focus and natural colours FULL REVIEW Aug 2007

HANNSG HW223DP

★★★★★

£180 inc VAT



The HW223DP's brushed-silver surround and black stand look classy. The display supports HDCP, so it's great for HD video. An included adaptor allows a component video source to connect to the DVI input. It produces a clear, sharp image using both D-sub and DVI inputs, with colours that look rich and natural.



22in WIDESCREEN LCD 1,680x1,050 native resolution, D-sub, DVI, 3.5mm line in connectors, four-port USB2 hub, 5ms response time, 800:1 contrast ratio
PART CODE HW223DP
SUPPLIER www.dabs.com
DETAILS www.hannsg.co.uk
✓ Crisp focus; rich colours; component video input FULL REVIEW Aug 2007

MITSUBISHI WL639U

★★★★★

£1,482 inc VAT

Mitsubishi's WL639U is the first business projector we've seen with a widescreen aspect ratio. It has a native resolution of 1,280x800 pixels, which is the same as most widescreen notebooks. This is particularly useful for presentations, because what you see on your notebook display matches what appears on the big screen exactly.

The WL639U has all the ports a business user will need. There are two D-sub inputs, so you can connect multiple PCs, and a D-sub output for a secondary display. The DVI input supports HDCP, allowing you to play protected HD video. However, there are no component or SCART inputs, so it's not suitable for home cinema use.

Mitsubishi describes the WL639U as an ultra-portable projector, but it's actually far too big to be carried around every day. Weighing a hefty 4.7kg and measuring 333x113x272mm, it is certainly not going to slip into a pocket on your laptop bag. It does come with its own bag, though, which means that it can be carried from a car to a meeting room.

The WL639U's size isn't that surprising when you consider its stunning 3,500 lumen brightness. This is enough to create a viewable image in any conditions bar strong sunlight. If you are doing presentations on the road, this projector should make an impact in any meeting room, however big or well lit it may be. The only potential problem is that the lens isn't designed to give you a big image at short-throw distances.



The powerful bulb limits the contrast ratio to 600:1. It looked fine when projecting text and diagrams, but lost detail in darker areas of video clips. It is capable of producing a clean white, and our colour test showed it's also capable of vivid shades. At full power, the lamp lasts a respectable 2,000 hours, but by reducing the output to a still impressive 2,500 lumens you can extend the bulb's life to 4,000 hours. In this mode, it will cost nine pence an hour to run, which is reasonable.

This projector has several useful features for business users. A network port lets you manage the projector's settings over a LAN, while a USB port gives you mouse control via the remote. The remote also has a built-in laser pointer for presentations.

The WL639U is a great projector to choose if you wish to include video in your presentations, as widescreen clips can be shown without letterboxing. It's also very bright and so it will make an impression in almost any environment. However, it's well over twice the price of Dell's 1800MP (see 'Also consider...', below) and will appeal only to those who really need to project presentations under bright lighting.

Seth Barton

SUMMARY

- ✓ Widescreen aspect ratio
- ✓ Very bright
- ✗ Expensive

OFFICE PROJECTOR 3-LCD, 1,280x800 native resolution, 600:1 contrast ratio, 3,500 ANSI lumens
PART CODE WL639U
SUPPLIER www.ivojo.co.uk DETAILS www.mitsubishi-presentations.com

CHOOSING AN... LCD Monitor

Follow the steps to find your ideal specs

IMAGE SIZE: 17in

NATIVE RESOLUTION: 1,280x1,024

INPUTS: VGA

Recommended minimum in grey

1 A basic 17in LCD monitor with the specifications listed above will cost around £95. It will be fine for basic Windows work, but it will have poor viewing angles and colour reproduction won't be very good, so it's not ideal for colour-sensitive work.

2 A VGA input means you'll be able to use the monitor with every PC, but it won't give you as good a picture as with DVI. This digital connection requires a compatible graphics card, but means there are no digital-to-analogue or analogue-to-digital conversions, which reduce the quality of the picture. A DVI connection automatically gets the best picture; you won't have to adjust clock or phase settings as you do with an analogue connection.

3 A 19in monitor will cost around £110 and has the same native resolution as 17in models, but the extra space is easier on the eye. If you want higher resolutions, a 20.1in (from around £190) or larger display will have a native resolution of 1,600x1,200.

A widescreen monitor makes sense if you watch a lot of movies or play games. The budget models come with a resolution of 1,440x900 (from around £110), while the larger, more expensive models have a resolution of 1,680x1,050 (from around £220).

4 If you want a better-quality picture, look for a monitor with high contrast ratios. The higher the ratio, the whiter the whites and the blacker the blacks look. In images with high contrast levels, you'll be able to see finer details.

The viewing angles are important, as wider angles mean you don't have to sit face on to get the best picture. Wider angles also mean that more people can watch your screen, which is useful if you want to show films.

Fast response times cut down on ghosting. Don't be blinded by the numbers, though, as a response time of 25ms or quicker is fine for all applications.

5 Extras such as speakers and a USB hub can be useful, but don't buy solely for them; monitor speakers tend to be poor, while USB hubs cost only a few pounds.

DELL 1800MP

★★★★★

£703 inc VAT



Dell's 1800MP is a good all-round projector, and at this price it's a bargain. It has excellent image quality. Two D-sub VGA connectors allow it to connect to two PCs at once, so you can switch between two presenters.

If you want a projector for business, this is the best choice, and it's also suitable for watching movies.



OFFICE PROJECTOR DLP 1,024x768 native resolution, 2,000:1 contrast ratio, 2,100 ANSI lumens
PART CODE 1800MP
SUPPLIER www.digitaldirect.co.uk
DETAILS www.dell.co.uk ✓ Good contrast; superb image quality; minimal rainbow effect FULL REVIEW May 2007

VIEWSONIC PJ503D

★★★★★

£305 inc VAT



ViewSonic's PJ503D is a budget office projector. Its native resolution of 800x600 is low, but it is fine for presentations. It can produce a large 59in image at 2½m, making it ideal for small rooms.

For an office where you give regular presentations, this projector is an excellent choice and great value.



OFFICE PROJECTOR DLP, 800x600 native resolution, 2,000:1 contrast ratio, 1,500 ANSI lumens
PART CODE VS11705
SUPPLIER www.misco.co.uk
DETAILS www.viewsoniceurope.com/uk
✓ Inexpensive; good contrast ratio
✗ Not very bright FULL REVIEW Jul 2007

HITACHI Illumina PJ-TX300

★★★★★

£768 inc VAT



The glossy sheen on Hitachi's Illumina PJ-TX300 looks fabulous, but there's more to this projector than its good looks. The PJ-TX300 will show a high-quality 203cm image at two metres.

If you want a projector to show films, this is an ideal choice, and it's a bargain, too.



HOME CINEMA PROJECTOR 3-LCD, 1,280x720 native resolution, 10,000:1 contrast ratio, 1,200 ANSI lumens
PART CODE HITPRX63
SUPPLIER www.pixmania.co.uk
DETAILS www.hitachidigitalmedia.com
✓ Inexpensive; superb image quality; excellent contrast
FULL REVIEW May 2007